Daylily Rust

Daylily rust has become prevalent in the Americas over the last two years, being previously found only in Asia. The purpose of this project was to determine if the rust in the Americas is the same or different from that in Asia

Puccinia hemerocallidis

Results: Teliospores and urediniospore sizes varied among specimens but statistical analyses indicated that there was no significant difference in size between the Asian and the American spores. Three synapomorphies (including one indel) were present in the ITS region that distinguished the two Asian specimens from the four American specimens. However the ITS variation within the American or Asian specimens was approximately equal to variation between the specimens from the two broad geographic areas. The rust introduced into the Americans is *Puccinia hemerocallidis.*

Materials and Methods: Numerous specimens from Costa Rica and the United States were examined morphologically and compared with specimens from China, Japan, Russia, and Taiwan, including the type specimen from Siberia. In addition, the ITS region of the ribosomal DNA was sequenced from six representative fresh specimens from the Americas and Asia.

Read the full text of the study

Additional information can be found at:
Daylilly Rust Information Page
Daylily Rust Pest Alert

Suggested citation: Hernández, J.R.. Systematic Mycology and Microbiology Laboratory, ARS, USDA. 13 November 2002. Invasive Fungi. Daylily Rust. Retrieved October 5, 2007, from http://nt.ars-grin.gov/sbmlweb/fungi/index.cfm .

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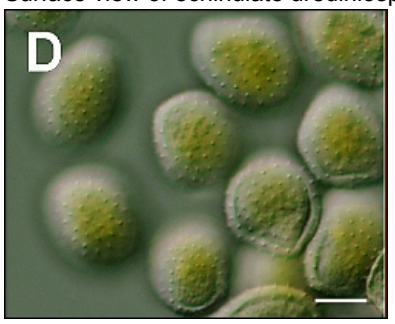
Heavily infected potted daylily plant with uredinia.

Mature uredinial sori with numerous yellow urediniospores on abaxial leaf surface.

Chlorotic leaf with few yellowish-brown, erumpent uredinia surrounded by a green halo.

Surface view of echinulate urediniospores.



Median view of urediniospores

Dark, erumpent telia on chlorotic and necrotic leaf.

Non-septate (mesospores) and one-septate teliospores.

Mesospores, common in American collections. Bar = 10 µm